



THE HANFORD SITE

PUREX Tunnel 2 photographs

July 2018



Background

CHPRC did an engineering evaluation of PUREX Tunnel 2 following the partial collapse of PUREX Tunnel 1. The evaluation included a structural analysis of Tunnel 2 based on construction drawings. The analysis assumed the tunnel was built according to drawings and not in a degraded condition.

The analysis concluded that stresses on several structural support members, such as weld connection plates and bolt connections to external concrete ribs, were above design capacity and Tunnel 2 has a “potential high risk of localized collapse.”



Observation of tunnel condition following construction

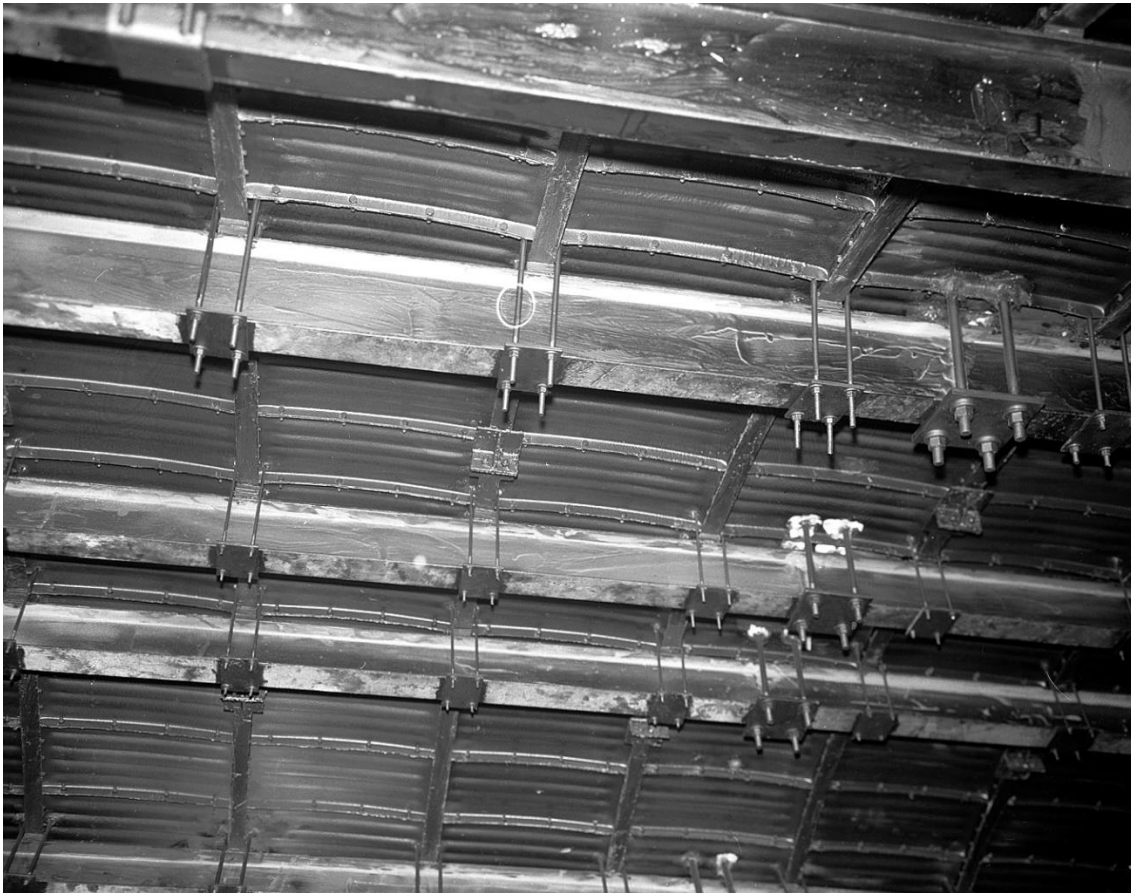


Photo of PUREX Tunnel 2 interior after construction was completed in 1964. The tunnel was built in the shape of a Quonset hut with a series of steel rib supports running perpendicular to the length of the tunnel. Corrugated steel roof panels are bolted to the supports. The roof was reinforced with additional steel supports.



Still frames/photos from video inspection of PUREX Tunnel 2 in April 2018

To examine the condition of PUREX Tunnel 2 and confirm the tunnel was built according to construction drawings, video cameras were inserted through openings in the top of the tunnel in April 2018. These photos show corrosion of bolts, weld plates and bolt penetration locations. While not an indication of imminent collapse, the fact that some components are stressed above design capacity and are also corroding is a concern



Still frames/photos from video inspection of PUREX Tunnel 2 in April 2018

